

Review Questions:

(1) From the Yellow Text:

Pg.147: Exercise 1: #1abcd, #2abcd

Exercise 2: #1abcd, #2abcd

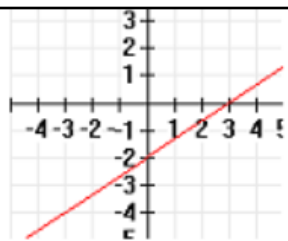
Exercise 3: #1abcd

Pg.172# 1(a-i) #2 (abcd)

(2) From our Text:

Pg.152 # 2,3,4

Practice Questions



1. The y-intercept of the line is: A. 1 B. -2 C. 3 D. 4
2. The x-intercept of the graph is: A. 1 B. -2 C. 3 D. 4
3. The line shown has:
A. a zero slope B. a negative slope C. a positive slope D. an undefined slope
4. The equation of the line shown in the graph is:
A. $y = 3x + 2$ B. $y = \frac{2}{3}x - 2$ C. $2y = 3x - 2$ D. $y = -\frac{2}{3}x - 2$
5. A popular movie rental company charges a monthly membership fee of \$5.00 and charges \$2.00 for each movie rented during the month (M). The equation for the total charges (C) is:
A. $C = 2 + 5M$ B. $C = 5 + 2M$ C. $M = 5 + 2C$ D. $M = 2 + 5C$
6. In what form is $y = 3x + 2$ expressed as?
A. slope, y intercept form B. slope, x-intercept form C. point form D. intercept form
7. If the slope of a line is -4 and the y-intercept is -2 then the equation of that line is:
A. $y = -4x + 2$ B. $y = 4x + 2$ C. $y = -4x - 2$ D. none of these

8. You are given the points on a graph line (1,2) and (2,7). Using this information determine the equation of the line passing through these points, in $y = mx + b$ form

9. Find the equation of a line with a slope of 2, passing through the point (3, -2). Write your answer in the $y = mx + b$ form.

Chapter 3 Test Review

Section 3.1 - Describing Patterns

Key Terms: Continuous Data Dependent/Independent Variables
Discrete Data Domain and Range
Equation Linear

Concepts: Graphing Results and Making Predictions
Using Patterns and Models
Connecting Patterns with Equations (Remember the connected cubes and # of faces)

Section 3.2 -

Solving different types of equations and solving word problems using equations

Section 3.3 - Decision Making and Patterns

Key Terms: Distributive Property (Example: $2(x + 5)$ is $2x + 10$)
Identity
Intersection Point (when the two equations are equal)

Concepts: Making Decisions
Extending Equation Solving
Equations with Fractional Expressions (remember to multiply by the LCM)

Section 3.4 - Predictions and Lines: $y = mx + b$

Key Terms: Slope (different types)
Slope y-intercept form ($y = mx + b$)
Undefined and zero
x-intercept (when $y = ?$)
y-intercept (when $x = ?$)

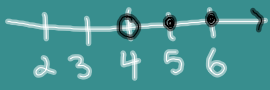
Concepts: Connecting Equations and Graphs of Lines
Constructing Graphs (table of values)
Creating Equations ($y = mx + b$: the 7 situations)
Writing and Using Equations
Equations and the x-intercepts
Rearranging Equations and Formulas

Extra Practice (Some of these we may have already done, however it would be smart to review them):

1. Page 100, #13, 14, 16
2. Page 107, #8
3. Page 112, #4, 5, 9
4. Page 114, #12
5. Page 115, #17
6. Page 116, #24
7. Page 120, #7, 8, 10
8. Page 123, #16, 17, 19
9. Page 125, #21, 23
10. Page 129, #34, 35

Review Sheet

(1) a) $\{x \mid x > 4, x \in \mathbb{W}\}$ 5, 6, 100



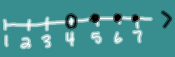
(2) $\mathbb{W} \cap \{x \mid x = 1, 2, 4, x \in \mathbb{W}\}$

(4) a) DB $y = 75 + 30x$ $y = 30x + 75$
 TH $y = 50 + 40x$

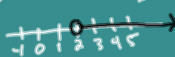
b) $75 + 30x = 50 + 40x$ Solve for x
 $\quad \quad \quad -30x \quad \quad \quad -30x$
 $75 = 50 + 10x$
 $-50 \quad -50$
 $25 = 10x$
 $\frac{25}{10} = \frac{10x}{10}$
 $x = 2.5$

5) $x\text{-int.} =$
 $y = 0$
 $(-, 0)$
 $y\text{-int.}$
 $x = 0$
 $(0, -)$

① a) $\{x \mid x \geq 4, x \in \mathbb{W}\}$ $\leq \geq$



d) $\{x \mid x > 2, x \in \mathbb{R}\}$ $\mathbb{R}, \mathbb{W}, \mathbb{N}, \mathbb{I}$
 \mathbb{Q}, \mathbb{Q}



2) a) $\mathbb{D} \{x \mid x = 1, 2, 4, x \in \mathbb{W}\}$
 $\mathbb{R} \{y \mid y = 1, 2, 3, y \in \mathbb{R}\}$

3)

4) DB a) $y = 75 + 30x$ b) $75 + 30x = 50 + 40x$
 TH $y = 50 + 40x$ $\quad \quad \quad -50 \quad \quad \quad -50$
 $\quad \quad \quad 25 + 30x = 40x$
 $\quad \quad \quad -30x \quad \quad \quad -30x$
 $\quad \quad \quad 25 = 10x$
 $\quad \quad \quad \frac{25}{10} = \frac{10x}{10}$
 $\quad \quad \quad x = 2.5$
 $\quad \quad \quad 2.5 \text{ hrs.}$

It would
 2 1/2 hrs.

5) $4x - 2y = 9$ Rearrange
 $-4x = -4x + 9$ $x\text{-int.}$
 $\frac{-2y}{-2} = \frac{-4x + 9}{-2}$ $y\text{-int.}$
 $y = 2x - 4.5$

$x\text{-int.}$
 $y = 0$
 $0 = 2x - 4.5$
 $4.5 = 2x$
 $\frac{4.5}{2} = \frac{2x}{2}$
 $2.25 = x$
 $x = 2.25$

$(2.25, 0)$